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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,981	01/12/2007	Gian Pietro Beghelli	1340-049	9344
7590 James V. Costigan Hedman & Costigan 1185 Avenue of the Americas New York, NY 10036-2646			EXAMINER BERHANU, SAMUEL	
			ART UNIT 2838	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/591,981

**Applicant(s)**

BEGHELLI, GIAN PIETRO

**Examiner**

SAMUEL BERHANU

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 4, 9 are objected to because of the following informalities:
2. Claim 4 recites the limitation "said electronic recharging" in line 2. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.
3. Claim 9 recites the phrase "thanks to a notch" in line 2. It is improper usage of words. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bragdon (US 4,602,203) in view of Eggert et. al. (US 6,262,559) (hereinafter Eggert).

As to Claim 1, Bragdon discloses in Figures 1-5, a battery recharging device for batteries (6), and for the display of battery packs (5) at a point of sale said battery charging device comprising at least a supporting element (**Figure 1 element 15**) (1, 17, 51), which includes a series of housings (Figures 1 and 4, **19**) (2, 18) for insertion and/or linking of battery packs (5) at a point of sale, and

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means (**Figure 3,98, 100, 106,108**) for the charging, recharging and/or maintenance of the electric charge, electrically connected to said housings (2, 18) .

Eggert discloses in Figure1, wherein each pack of batteries (**33**) (5) of batteries (6) contains batteries, connected in series (**the batteries are connected in series, see figure 2, element 33**) to each other, of which at least two terminals (36 and 37) (7, 8, 80) are accessible from the outside of the pack of batteries (5) for connection to the recharging and/or maintenance means (**see figure 1, element 10**) (20, 30) of an electric charger

It would have been obvious to a person having ordinary skill in the art at the time of the invention to connect the plurality of batteries of Bragdon in series as taught by Eggert in order to maintain the charge in the batteries for extended period of time.

As to Claim 2, Bragdon in combination with Eggert discloses at least one suitable housing for checking the charger level of the battery packs said suitable housing being adapted to be used for the temporary support of one of said battery packs

As to Claim 4, Bragdon in combination with Eggert disclose, said recharging means of the electric charger, immediately activates a charging cycle of the battery pack (5) inside at least one of said housing (2, 18).

As to Claim 5, Bragdon in combination with Eggert disclose, characterized in that each of said housings (2, 18) comprises signaling means,

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suitable for indicating the charge level and/or the arrival at the maximum charge level of the battery pack (5) that is inserted (see column 6, lines 33-36).

As to Claim 6, Bragdon in combination with Eggert disclose, characterized in that said two terminals (7, 8, 80) are situated at different distances, in order to be able to automatically select the necessary charge levels for the various types of batteries (6) to be charged (since batteries are disposed in different slots they are different position).

3. Claims 7-9 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bragdon in views of Eggert, and in view of Wang (US 5, 157, 318).

As to Claim 7, Wang discloses in Figures 1-5, a battery recharging device (6), characterized in that said at least one supporting element (21) comprises, in correspondence with each seat or housing (2, 18), at least one metallic body (23), pushed by at least a first conductor element (28), of the elastic type, which ensures the electric contact with said at least two terminals (7, 8, 80) of the battery pack (5), whereas at least a second conductor element (29) produces the electric contact with said recharging and/or maintenance means of the electric charge.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify charging bay of Eggert and add a battery positioning means as taught by Wang in order to hold batteries in stable position during charging for secure charging process.

As to Claim 8, Bragdon in combination with Eggert and Wang disclose, characterized in that at least one of said terminals (7, 8, 80) contacts at least one spring nail (38), in turn electrically connected to said recharging and/or maintenance means (20, 30) of the electric charge.

As to Claim 9, Bragdon in combination with Eggert and Wang disclose, characterized in that said battery packaging or pack (5) is held in position thanks to a notched profile (42) of said at least one supporting element (1, 17, 51), which is engaged with an incision situated on the packaging (5).

4. Claims 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bragdon in view of Eggert, and in view of Malaspina (US 5,544,784).

As to Claim 11, Malaspina discloses in Figures 1-7, characterized in that said at least one supporting element (1, 17, 51) comprises automatic selection (see figure 14, element 29) and supply means of at least one of said battery packs (5), driven by a control logic (50), when a selection is effected by a user by means (10, 11, 12, 32, 33, 34) situated on the outer casing (35) of the recharging device.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to add user interface in the battery charger device of Bragdon and Eggert as taught by Malaspina in order to allow the user to select charging parameters based on battery charge level or battery type.

As to Claim 12, Malaspina discloses, characterized in that said at least one supporting element (1, 17, 51) includes a series of columns (13, 14, 16, 20, 26, 37), inside which the battery packagings or packs (5) are arranged, which are

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introduced into appropriate seats (18) and kept in a horizontal position by means of shelves (15).

As to Claim 13, Malaspina discloses, characterized in that said control and running logic (50) selects at least one battery pack (5) containing the most highly charged batteries (6) of the type selected.

As to Claim 14, Malaspina discloses, characterized in that said automatic selection and supply means comprise at least one pin (91) of an expeller, kept in rest position by at least a first elastic element (92), and at least one coiling, which, after the passage of an electric current, generates an entrainment force of said pin (91) of the compression of said first elastic element (92), which produces the expulsion of the packaging (5) and the falling of said packaging (5) onto a collection surface (36).

As to Claim 15, Malaspina discloses, characterized in that said at least one supporting element (1, 17, 51) is electrically connected, by means of at least a second elastic element (96), with a body (94), associated with at least a third elastic element (95) and suitable for contacting at least one terminal (80) of the battery pack (5) for the charging of the batteries (6) contained therein.

As to Claim 16, Malaspina discloses, characterized in that said battery packaging or pack (5) is made up of two symmetrical shells (23, 24) which mechanically withhold the batteries (6) and leave the relative terminals free, so that each battery (6) can be charged individually.

As to Claim 16, Bragdon in combination with Eggert disclose, characterized in that said battery packaging or pack (5) is made up of two

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symmetrical shells (23, 24) which mechanically withhold the batteries (6) and leave the relative terminals free, so that each battery (6) can be charged individually .

As to Claim 17, Malaspina discloses, characterized in that said battery packagings or packs (5) are stacked on top of each other, in correspondence with each column (13, 14, 20, 16, 26, and 37).

As to Claim 18, Malaspina discloses in Figures 1-7, characterized in that said automatic selection and supply means comprise at least one motor (28), whose rotation produces the moving of at least one pushing element (27) which causes the release of each battery packaging or pack (5) from the withholding elastic elements (29, 43).

As to Claim 19, Malaspina discloses in Figures 1-7, characterized in that said automatic selection and expulsion means comprise at least one pushing element (27B), moved by at least one belt (26B), in turn activated by at least one motor (28B).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bragdon (US 4,602,203) in view of Eggert et. al. (US 6,262,559) (hereinafter Eggert), and in view of Flowerdew et. al. (US 7,211,986) (hereinafter Flowerdew)

As to Claim 10, Flowerdew discloses in Figures 1 and 2, characterized in that said battery packaging or pack ( battery pack of the device) has at least one guiding wing (the edges are guiding wings) for insertion inside said seats and/or housings (1) and is also equipped with at least one inductor element (316) and/or at least one rectifier diode (318), said at least one supporting element (1)



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comprising at least one magnetic circuit (310), with polar expansions, on which at least one coiling (312) is wound, so that, upon insertion of the packaging (5) in the respective seat and/or housing (1), said inductor element (312 and 314), inserted between said polar expansions of the magnetic circuit (316), forms an inductive magnetic coupling with said coiling , so as to transfer the electric energy, supplied by an alternating current generator and rectified by said diode, to the batteries of the packaging .

It would have been obvious to a person having ordinary skill in the art at the time of the invention to add magnetic materials and coils in Bragdon's apparatus for inductively charging rechargeable batteries as taught by Flowerdew in order to avoid electrical leakage due to corrosion or poor electrical contacts between the batteries and the charger base.

### ***.Response to Arguments***

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL BERHANU whose telephone number is (571)272-8430. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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